

December 9, 2009

**DECISION AND ORDER
OFFICE OF HEARINGS AND APPEALS**

Appeal

Case Name: Pacific Underground Construction, Inc.

Date of Filing: October 5, 2009

Case Number: TEG-0005

This decision concerns a Petition for Special Redress (Petition) filed by Pacific Underground Construction, Inc. (PUC). In its Petition, filed pursuant to OHA procedural regulations set forth in 10 CFR Part 1003, Subpart G, PUC requests that OHA review a Final Notice of Violation issued to PUC on September 3, 2009, by the DOE Office of Health, Safety and Security (HSS) under the provisions of 10 CFR Part 851 (Worker Safety and Health Program).

I. Background

A. Worker Safety and Health Program

Under Section 3173 of the National Defense Authorization Act (NDAA) of 2003, Congress directed DOE to promulgate worker safety and health regulations that maintain a high level of protection for employees of DOE contractors. *See* Public Law 107-314 (December 2, 2002), codified at 42 U.S.C. 2282(c)(3). The NDAA provided that these regulations include flexibility to tailor implementation to reflect activities and hazards associated with a particular work environment; to take into account special circumstances for facilities permanently closed or demolished, or which title is expected to be transferred; and to achieve national security missions in an efficient and timely manner. The statute further makes covered DOE contractors that violate these regulations subject to civil penalties for violations of nuclear safety regulations. *See* 42 U.S.C. 2282(c)(3).

The DOE Worker Safety and Health Program, codified in 10 CFR Part 851, was adopted by DOE effective February 9, 2007, to implement the statutory mandate of Section 3173 of the NDAA. Part 851 establishes the framework for a worker protection program designed to reduce and prevent occupational injuries, illnesses, and accidental losses by requiring DOE contractors to provide their employees with safe and healthful workplaces. DOE contractors (except those in facilities operated under the authority of the Deputy Administrator for Naval Reactors or who are regulated by the Occupational Safety and Health Administration) are responsible for developing and implementing a DOE-approved worker safety and health program consistent with the provisions of 10 CFR Part

851. Pursuant to Part 851, DOE contractors are responsible for the health and safety of their employees while they are present on the DOE site for purposes of their employment, to maintain safe conditions at all of the DOE workplaces for which they are responsible (*see generally* Part 851, Subpart B) and to coordinate with other contractors responsible for work at the covered workplaces to ensure the safety and health of workers at multi-contractor facilities. *See* 10 CFR § 851.11(a)(2)(ii). DOE contractors and subcontractors at any tier are responsible for compliance with Part 851. The program establishes procedures for HSS to investigate whether a requirement has been violated, for determining the nature and extent of such violation, and for imposing an appropriate remedy. *See id.* §§ 851.40-851.44.

B. PUC Final Notice of Violation

The DOE's SLAC National Accelerator Laboratory (SLAC) occupies 426 acres of Stanford University (Stanford) property south of San Francisco, California, and is sited approximately 2 miles west of the main campus. Since its construction in the 1960s, state-of-the-art electron accelerators and related experimental facilities for use in high-energy physics and synchrotron radiation research have been designed, constructed, and operated at SLAC. SLAC is operated by Stanford under contract with the DOE's Office of Science.

PUC is an underground pipeline construction company based in San Jose, California. On May 18, 2007, following a bidding process, PUC entered into a contract with Stanford (SLAC Construction Subcontract No. 515-S-68711) to perform replacement of underground mechanical utilities for hot water, chilled water and cooling tower water systems in specified areas of the SLAC campus, as part of the SLAC Safety and Operational Reliability Improvements (SORI) Project. On June 14, 2007, PUC entered into a subcontract with another pipeline construction company, Western Allied Mechanical, Inc. (Western Allied) to remove, fabricate, and replace a portion of the utilities piping covered by PUC's contract with Stanford.

Part 851 enforcement proceedings were initiated by HSS against SLAC, PUC and Western Allied following an investigation undertaken by HSS into the facts and circumstances surrounding a polyvinyl (PVC) pipe explosion that occurred on September 13, 2007, in Sector 30 of the linear accelerator facility at the SLAC. The investigation revealed that the explosion occurred when a Western Allied welder began cutting into a metal pipe to install a pressure gauge. The metal pipe was connected to PVC piping that had been installed the previous day using PVC primer and cement, and then sealed for pressure testing. The heat from the welder's acetylene torch ignited residual vapors from the primer and cement that were trapped inside the piping, causing the explosion. The force of the explosion, which occurred in an outdoor trench, threw shrapnel 60 feet outward. One piece was found more than 100 feet from the scene and another piece punctured an adjacent sheet metal wall. No workers were permanently injured, but one worker suffered temporary hearing loss and another worker was nearly knocked to the ground from the force of the explosion.

Following its investigation, HSS issued a Report of Investigation, dated July 23, 2008, in which it identified multiple violations by PUC of the DOE worker safety and health requirements of Part 851. These violations are described in a Preliminary Notice of Violation (PNOV), 10 CFR § 851.42,

issued to PUC on April 3, 2009.^{1/} According to the PNOV, the violations by PUC involved deficiencies in construction safety and fire protection, and failure to adhere to general safety requirements and procedures.

With regard to construction safety, the PNOV states that PUC failed to ensure that its subcontractor, Western Allied, developed a construction project safety and health plan, and activity hazard analysis in accordance with 10 CFR § 851.24 and Part 851, Appendix A, Section 1 (*Construction Safety*). According to the PNOV, the site-specific safety plan (SSSP) and job safety analysis (JSA) prepared by Western Allied did not adequately identify and assess the hazards associated with the piping replacement work being done in Sector 30 or establish controls necessary to eliminate or abate those hazards to protect workers. PNOV at 2. In this regard, the PNOV states, *inter alia*, that “[t]he JSA listed ‘cutting and torching of bolts’ as a phase of work/job step and ‘static electricity and sparks’ as potential hazards. The analysis failed to consider the potentially explosive conditions created by the combination of ignitable vapors from the PVC primer and cement, and enclosed space (i.e., sealed piping system), and the application of heat to the carbon steel piping attached to the PVC piping.” *Id.* at 3.

The PNOV further charges that PUC failed to ensure that appropriate welding and cutting fire safety control measures were implemented or failed to ensure that Western Allied was cognizant of the potential flammable and explosion hazards associated with performing hot work on piping that could contain ignitable vapors. The PNOV notes that “[t]he welder performing the hot work on September 13, 2007, . . . had no experience working with a piping configuration comprised of different materials (ductile iron, PVC, and steel) such as the one used in the underground utilities upgrade in Sector 30 of the linear accelerator facility.” *Id.* at 5. Finally, among the general health and safety deficiencies found by HSS, the PNOV cites PUC’s failures: 1) to document the results of safety inspections for the work performed by Western Allied, 2) to review the SSSP submitted by Western Allied, in accordance with its contract with Stanford, and 3) to ensure that a JSA was prepared, or the existing JSA modified, to reflect work performed by Western Allied to install a pressure gauge in the carbon steel pipe, purportedly discussed during a tailgate meeting on the day of the explosion. PNOV at 6.

The PNOV concludes that, collectively, PUC’s safety deficiencies relating to the September 13, 2007, incident constitute a Severity Level I violation since “there is a potential that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use” PNOV at 6, *quoting*

^{1/} HSS concurrently issued PNOV’s to SLAC and Western Allied citing Part 851 violations as a result of their involvement and safety deficiencies in connection with the September 13, 2007, incident.

10 CFR Part 851, Appendix B, section VI(b)(1).^{2/} On this basis, the PNOV proposes that PUC pay a civil penalty of \$42,000.

On May 1, 2009, PUC filed a response to the PNOV (PNOV Response) in which it argues that the firm should not be held liable under Part 851 for the alleged violation. More specifically, PUC argues that the firm was never informed during the contract bidding process, through project documents or otherwise, that its work was subject to the health and safety standards of Part 851. PUC asserts that the firm “submitted a bid with the understanding Stanford University would be administering, reviewing, and approving all construction related documents including safety.” PNOV Response at 1. Regarding construction safety, PUC contends that “[t]he SSSP submitted by PUC and Western Allied was accepted by Stanford University [and, a]ny questions with the SSSP should have been communicated by SLAC upon review.” According to PUC, SLAC assumed daily job safety analysis responsibilities and PUC was not expected to have expertise in cutting/welding work or in identifying, evaluating or controlling hazardous exposures. PUC maintains that it “performed its due diligence in obtaining Western Allied safety program and ensuring [job safety analyses] were submitted to SLAC on a daily basis for work activity.” *Id.* While PUC concedes that it did obtain the SSSP from Western Allied and submit it to SLAC, PUC argues that the pressure gauge installation work cited in the PNOV “was beyond the reasonable scope of expertise for PUC.” *Id.* at 2. Finally, PUC contends that the proposed financial penalty would have a significant financial impact on the firm and detrimentally affect its ability to qualify for future projects. *Id.*

HSS considered the contentions raised by PUC in its PNOV Response and determined nonetheless that a Final Notice of Violation (FNOV) be issued to PUC on September 3, 2009, assessing the proposed civil penalty of \$42,000.^{3/} In reaching this determination, HSS states:

^{2/} In its letter transmitting the PNOV, HSS asserts that “the explosion could have resulted in fatalities or severe injuries far exceeding the temporary hearing loss reported by one worker. These consequences were averted only by circumstance and timing. As the General Construction Subcontractor for the underground utilities replacement work, [PUC] was responsible for proper execution of the work associated with the Safety and Operational Reliability Improvements project in Sector 30 of the linear accelerator facility. This included a responsibility for ensuring safe working conditions not only for [PUC] employees but also those subcontractor employees performing work pursuant to a contract with [PUC].” Letter of April 3, 2009, from John S. Boulden III, Acting Director, HSS Office of Enforcement, to Thad M. Corbett, Vice President, PUC.

^{3/} Concurrently, on September 3, 2009, HSS issued FNOV’s to SLAC and Western Allied, imposing civil penalties of \$210,000 and \$56,000, respectively, based upon their Part 851 violations found by HSS relating to the September 13, 2007, pipe explosion. Neither SLAC or Western Allied elected to petition OHA for a review of the respective FNOV’s issued to those contractors.

[N]one of the reasons stated in the reply to the PNOV justify the rescission of the violation or mitigation of the proposed penalty. Since the inception of the Part 851 enforcement on February 9, 2007, contractors, including subcontractors, have been responsible for the safety and health of both their employers and any lower tier subcontractor employees that conduct activities at DOE covered workplaces. Actions by PUC provide evidence of PUC's acceptance of responsibility with Part 851 requirements including: (1) article 7 of the Stanford University-PUC contract, signed on May 18, 2007, which specifically cites this responsibility; and (2) the Subcontractor Site Specific Health & Safety Plan Form, signed by PUC and submitted to Stanford University before commencement of the underground utilities upgrade work. PUC should have fully considered any lack of expertise needed to comply with Part 851 and provide effective oversight of Western Allied's cutting, welding, and pressure gauge installation activities before entering into a contractual agreement with Stanford University for the full scope of the cooling tower water pipe replacement work.

FNOV at 1. In the letter transmitting the FNOV to PUC, HSS informed PUC of its right to request a review of the FNOV by OHA, 10 CFR § 851.44, by the filing of a petition under OHA procedural regulations set forth at 10 CFR Part 1003, Subpart G.

C. PUC's Petition

In its Petition, received by OHA on October 5, 2009, PUC asserts that "PUC's capacity was as a subcontractor not a General Subcontractor as suggested. The reference to General Subcontractor does not exist in the ITB [bid solicitation] distributed by Stanford University. PUC is not a DOE registered contractor nor subcontractor as parts of the report suggest." Petition at 1. Beyond this assertion, PUC merely recites the arguments raised in its PNOV Response: "PUC reiterates the fact that the 10 CFR 851 rule was not included in the ITB and maintains that this oversight by Stanford University should not punish or incriminate subcontractors that were not properly informed of the potential impact. It is SLAC's responsibility to distribute all appropriate documents. This alleged violation would have a significant impact on PUC. The current amount of the proposed fine would impact PUC's financial standing in a year that is forecast to have a 40-50% decline in revenues." *Id.*

Pursuant to 10 CFR §§ 1003.75 and 1003.76 of OHA's procedural regulations, we directed that PUC provide specified additional information in support of its petition. *See* Letter of October 19, 2009, from Fred L. Brown, Deputy Director, OHA, to Thad M. Corbett, Vice President, PUC. PUC provided the requested information in submissions received by OHA on November 3, and November 23, 2009. In its November 3, 2009, submission (November 3 Submission), PUC again raises the argument advanced in its PNOV Response that SLAC, and not PUC, was responsible for reviewing the required safety documentation (JSA's) and ensuring the safety of the work performed by Western Allied.

II. Analysis

We have thoroughly considered the arguments raised by PUC in its petition and the supporting documentation provided by the firm. For the reasons below, we have determined that PUC's petition must be denied.

Initially, we cannot accept PUC's position that the firm should not be held liable for the Part 851 violations found by HSS relating to the September 13, 2007, incident, because the firm was not given specific notice of the applicability of Part 851 during the contract bidding process. We note initially that the SLAC Instructions to Bidders, provided by PUC in its supplemental submission, clearly states in pertinent part: "Individuals who work at SLAC under subcontract to perform specific construction activities are responsible for complying with all applicable laws and regulations including . . . DOE Safety Orders," See PUC November 3 Submission, SLAC Instructions to Bidders for Fixed Price Construction Subcontracts and Purchase Orders, ¶ 14. In addition, and more importantly, the contract with Stanford signed by PUC on May 18, 2007, mirrors this language and specifically cites Part 851: "Individual's who work at SLAC under subcontract to perform specific construction activities are responsible for complying with all applicable laws and regulations including . . . the U.S. Department of Energy - Worker Health and Safety Program (10 CFR 851) . . . These expectations shall also be flowed down to any lower-tier subcontractors that are in the employ of the Subcontractor while performing the effort on SLAC premises." Article 7, SLAC Construction Subcontract, Number 515-S-68711 (awarded to PUC). Thus, PUC's claim that the firm had no notice of the applicability of Part 851 is without merit.

Nor can we accept PUC's position that the firm bore no responsibility for the unsafe practices of its subcontractor, Western Allied. In its Petition (at 1), PUC asserts that it "was a subcontractor not a General Subcontractor as suggested," apparently contesting HSS's statement in the Report of Investigation that: "PUC, as a 'General Construction Subcontractor,' had general supervisory authority over Western Allied for the work performed by Western Allied under contract to PUC. This included responsibility for ensuring Western Allied's compliance with worker safety and health requirements." July 12, 2008, Report of Investigation at 2. Apparently, through artificial semantic distinction, PUC now seeks to diminish its level of responsibility for ensuring the safe practices of its subcontractor, Western Allied. We will not go down that path. It is correct that PUC is identified as "Subcontractor" in the contract PUC entered into a contract with Stanford (SLAC Construction Subcontract No. 515-S-68711) on May 18, 2007. However, in the June 14, 2007, Construction Subcontract Agreement with Western Allied, PUC identifies itself as "General Contractor" and Western Allied as "Subcontractor." The simple facts are that Stanford contracted with PUC to perform replacement of underground utilities in connection with the SORI Project and PUC elected to subcontract a portion of its work to Western Allied. No contractual relationship existed between

Stanford and Western Allied, 4/ but only between Stanford and PUC.5/ We find untenable PUC's attempt to now distance itself from the contractor it chose to hire.

In the cover letter to its November 3 Submission, PUC asserts that "SSSP's for Western Allied were submitted directly to Stanford University without exception. . . . Chapter 42 and the Hazard Analysis Report shows SLAC as taking responsibility for JSA's. The hazard report spells out roles and responsibilities. Chapter 42 section 5 delineates responsibilities of SLAC and the subcontractor." We have reviewed the cited "Roles and Responsibilities" provisions, Section 5.1.3. of Chapter 42, Subcontractor Construction Safety, of the SLAC Environment, Safety and Health Manual (ES&H Manual), submitted by PUC.6/ We agree that these provisions require the SLAC Project Manager, *inter alia*, to establish "technical and safety requirements for the project" and

4/ As part of its November 3 Submission, PUC provided the SLAC/Stanford University "General Terms and Conditions for Fixed Price Construction Subcontractors and Purchase Orders." Article 14 of this document, entitled "Control of Sub-Subcontractors," relates to "lower-tier subcontractors utilized by the Subcontractor" and states specifically that "[n]othing contained in this subcontract shall create any contractual relation between the Sub-subcontractor and the University."

5/ PUC claimed in its PNOV Response that PUC does not have the expertise in assessing the safety hazards associated with pipe cutting/welding work undertaken by Western Allied. However, we must agree with the FNOV that PUC should have fully considered any lack of expertise needed to comply with Part 851 and provide effective oversight of Western Allied's cutting, welding, and pressure gauge installation activities before entering into a contractual agreement with Stanford University for the full scope of the cooling tower water pipe replacement work. *See* FNOV at 1.

6/ We note that the version of Chapter 42 (Subcontractor Construction Safety) of the ES&H Manual submitted by PUC is dated "18 November 2005." *See* PUC's November 3 Submission. However, the FNOV quotes provisions from an updated version of Chapter 42 issued on June 1, 2007, which apparently more clearly defines the safety role of the subcontractor. *See* FNOV at 5-6. For instance, the June 1, 2007, version of Chapter 42 (Section 5.1.9.8) states specifically that the subcontractor (PUC) "[t]akes primary responsibility for the safety of their personnel, their subs [i.e Western Allied], and their equipment." PUC argues, however, that "[t]he June 1, 2007 version of Chapter 42 is after the bid date and award date. Any revisions, post bid and post award, would be distributed by SLAC and [PUC] does not have a record of being notified of revisions." E-mail dated December 3, 2009, from Thad M. Corbett, Vice President, PUC, to Fred L. Brown, Deputy Director, OHA. Notwithstanding, we find that HSS correctly applied the updated version of Chapter 42, in effect at the time of the September 13, 2007, incident. In any event, we find that even under the November 2005 version of Chapter 42, PUC is properly held accountable for its failure to ensure the safety practices of its subcontractor, Western Allied. As discussed in this decision, we reject PUC's claim that the "Roles and Responsibilities" provisions of Chapter 42 absolved PUC of this safety obligation.

conduct “appropriate technical and safety reviews of the project in accordance with SLAC policy.” Chapter 42, ES&H Manual, Section 5.1.3.3. In addition, these provisions specify that a University Technical Representative is responsible for “[r]eviewing the subcontractor’s site-specific safety plan, job safety analysis, and relevant material safety data sheets . . .” *Id.*

However, Chapter 42 of the ES&H Manual does not relinquish PUC, as subcontractor, of its responsibility to ensure the safe practices of its lower tier subcontractor. Section 5.1.3.1 of the “Roles and Responsibilities” provisions reads, in part:

Subcontractors working at SLAC are responsible for providing their employees, the employees of their lower-tier subcontractors, . . . with a work site free from safety and health hazards. Subcontractors are required to comply with their contract’s safety specifications, including DOE orders, and applicable federal, state, local, and SLAC safety regulations and policies. Subcontractors are responsible for ensuring the employees they bring on the site to work are technically qualified and capable of performing that work in a safe manner. Construction subcontractors are responsible for providing technically competent, physically capable personnel fully trained in the safety requirements of their craft.

A fair reading of these provisions, in concert, compels a conclusion that SLAC, PUC and Western Allied each had an individual and shared responsibility to ensure that all appropriate safety measures and procedures were implemented with regard to the cutting, welding and gauge installation work being done by Western Allied employees. SLAC and Western Allied have not been excused from their failures to fulfill their safety obligations (*see* note 3, *supra*), and we are not persuaded that PUC should be insulated from its own failure.^{7/}

Finally, we do not accept PUC’s contention that the FNOV causes the firm a financial hardship. PUC argues that the \$42,000 civil penalty assessed against it by the FNOV would have “a significant financial impact on PUC.” On October 19, 2009, we requested that PUC provide documentation to support its claim that the civil penalty “will cause PUC to suffer an economic hardship.” *See* Letter of October 19, 2009, from Fred L. Brown, Deputy Director, OHA, to Thad M. Corbett, Vice President, PUC, at 2. However, PUC has provided no specific evidence to support its claim, but makes only a general assertion in the cover letter to its November 3 Submission that “[a]s for economic hardship, PUC sales are down approximately 30% and as stated in prior correspondence,

^{7/} While PUC asserts that the JSA’s prepared by Western Allied were ultimately submitted to SLAC for review, PUC does not dispute the finding in the FNOV: “The JSA prepared by Western Allied for the piping replacement work, ‘CTW Piping Replacement - Sectors 21 thru 30,’ dated September 4, 2007, did not identify foreseeable hazards and appropriate protective measures associated with the work to be performed. PUC representatives, including the project foreman, periodically reviewed the JSA as evidenced by their signatures on the JSA as part fo daily sign in expectations.” FNOV at 3.

this violation will cause complications in the prequalification process for future opportunities.” Without more, we find this assertion unsubstantiated and speculative.

Moreover, we note that in imposing a \$42,000 penalty on PUC, HSS explains in the FNOV: “In weighing the imposition of a penalty, DOE considered the role of the other contractors involved, the size of PUC’s company, the economic impact of a penalty, and PUC’s corrective actions to prevent recurrence. Based on these factors, DOE consolidated PUC’s multiple violations into one Severity Level I violation and then reduced the base penalty value of \$70,000 accordingly.” FNOV at 2. Under these circumstances, we do not find the civil penalty assessed by the FNOV to be inappropriate or unduly punitive. We also observe that the \$42,000 civil penalty imposed on PUC is less than the civil penalties assessed against SLAC and Western Allied for their malfeasance in connection with the September 13, 2007, incident.

For the foregoing reasons, we affirm the issuance of the September 3, 2009, FNOV to PUC.

It Is Therefore Ordered That:

(1) The Petition for Special Redress filed by Pacific Underground Construction, Inc., on October 5, 2009, is hereby denied.

(2) This is a final Order of the U.S. Department of Energy.

Poli A. Marmolejos
Director
Office of Hearings and Appeals

Date: December 9, 2009